

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-155564

(43)Date of publication of application : 20.06.1995

(51)Int.Cl.

B01D 63/02

(21)Application number : 05-310778

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(22)Date of filing : 10.12.1993

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## (54) HOLLOW YARN MEMBRANE MODULE AND ITS PRODUCTION

## (57)Abstract:

PURPOSE: To efficiently scrubbing-clean the whole of a hollow yarn membrane in a module by having  $\geq 2$  sets of a hollow yarn membrane intertwined material, placing the  $\geq 2$  sets of the hollow yarn membrane intertwined material mutually in parallel at a fixed interval and integrally fixing the plural intertwined material to the one part of a resin fixing part.

CONSTITUTION: This hollow yarn membrane module uses the sheet type hollow yarn membrane intertwined material 1. The distance between the hollow yarn membrane intertwined materials 1 in the module is adjusted to be equal in consideration of uniformly air-bubbling to the whole of the membrane surface at the time of scrubbing cleaning. The distance between the sheets is selected in consideration of the efficiency of the scrubbing cleaning in air bubbling or the like, the prevention of the adjacent hollow yarn membrane intertwined material 1 from the contact and the membrane area per the module. Furthermore, the hollow yarn membranes are prevented to stick and integrate to each other by fixing to  $\geq 2$  sets of the hollow yarn membrane intertwined material 1 to the resin fixing part 3 of a housing 2 in every piece at the fixed interval.

